

ABSTRACT OF THE DISCLOSURE

A heater system is provided with a layered heater in communication with a two-wire controller, wherein a resistive layer of the layered heater is both a heater element and a temperature sensor. The two-wire controller thus determines temperature of the layered heater using the resistance of the resistive layer and controls heater temperature through a power source. Furthermore, a heater system using a layered heater in communication with a two-wire controller for a specific application of a hot runner nozzle in an injection molding system is provided by the present invention.